

Date: Tuesday, 11/21/2006 1:15:22 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : EXTRUSION 'I' BEAM TUBE 4"
Job Number : 29602	
Estimate Number : 10154	
P.O. Number : N/A	Part Number : D25001190
This Issue : 11/21/2006 S.O. No. : N/A	Drawing Number : D2500 REV F1
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : PURCHASED PARTS	Drawing Revision : F1
Previous Run : 25858	Material : N/A
Written By : <u>[Signature]</u>	Due Date : 12/10/2006 Qty: 160 Um: Each
Checked & Approved By : <u>[Signature]</u>	
Comment : Est: G 02.09.05 Added DSK 066	KJ/RF

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0

PG

PURCHASING



Comment: PURCHASING

Issue P/O: 2537

C206111122



- a) Extrude as per Dwg D2500
- b) Material: 6061-T6 (QQ-A-200/8)
- c) Minimum yield tensile strength = 35 ksi
- d) Minimum ultimate tensile strength = 38 ksi
- e) Minimum elongation = 8%
- f) Order at 190" long
- g) Bon L Canada Inc. tool # 897105
- h) To be packed per DSK 066
- i) Pull test to ASTM standard B221 required.
- j) Material certification is required

2.0

D25001190P

Ext'n - 'I' Beam Tube 4"



Comment: Qty.: 1.0000 Each(s)/Unit Total : 160.0000 Each(s)
 EXTRUSION 'I' BEAM TUBE 4"

3.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

- Receive & Inspect For Transit Damage
- Ensure material certification is attached

4.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

- Inspect dimensions per Dwg D2500
- Check Pull test per Dwg D2500 for compliance page attached.
- Check hardness with Webster tester

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/02/13
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: EXTRUSION 'I' BEAM TUBE 4"

Job Number: 29602

Part Number: D25001190

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

C/L 7/02/12 163

6.0

QC21

FINAL INSPECTION/W/O RELEASE



(163)

Comment: FINAL INSPECTION/W/O RELEASE

11/07/02/13

Job Completion



C/L 7/02/12 .

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>DW</i>	DRAWN BY <i>DW</i>	DART AEROSPACE LTD VICTORIA INTERNATIONAL AIRPORT, CANADA	
CHECKED <i>KE</i>	APPROVED <i>DW</i>	DRAWING NO. D2500	REV. F SHEET 1 OF 2
DATE 97:09:29		TITLE EXTRUSION	SCALE NTS
A	96:03:19	NEW ISSUE	
B	96:03:24	CHANGE INTERNAL WEB	
C	96:04:26	ADD D2500-3 WEB	
D	96:10:07	ADD MATERIAL PROPERTIES	
E	96:10:24	CHANGE MATERIAL TEMPER	
F	97:09:29	CHANGE MAT. TO 6061-T6	
F1	01.04.17	ADD NOTES 4 & 5 <i># CP</i>	

RELEASED
97/10/06 PS

1. MATERIAL: 6061-T6 (QQ-A-200/8)

MINIMUM TENSILE YIELD STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
MINIMUM ELONGATION = 8 %

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE ABOVE MINIMUM MECHANICAL PROPERTIES.

2. BREAK ALL SHARP CORNERS 0.010 MAX

3. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

4. FOR D2500-1, PART NUMBER IS D2500-1-XXX WHERE XXX IS CUT LENGTH IN INCHES (EG. D2500-1-190 IS 190" LONG)

D2500-1 EXTRUSION MANUFACTURED FROM: a) BON L DIE # 897105 → PREFERRED
b) CARADON MIDCAST DIE # PAH-28030
c) CARADON MTL DIE # MH-18868

5. FOR D2500-3, PART NUMBER IS D2500-3-XXX WHERE XXX IS CUT LENGTH IN INCHES (EG. D2500-3-100 IS 100" LONG)

D2500-3 EXTRUSION MANUFACTURED FROM CARADON INDALOX DIE # MS-18867

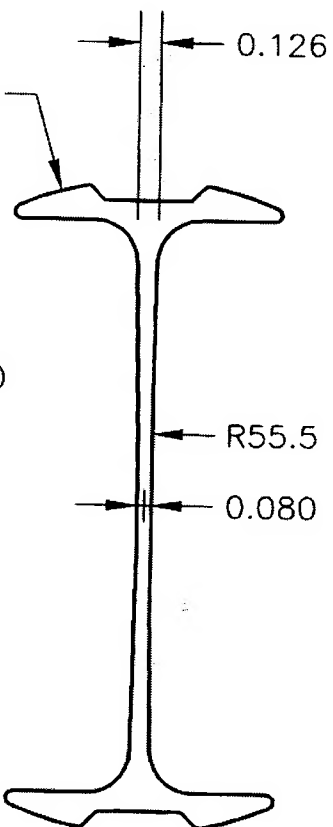
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 29602

DART

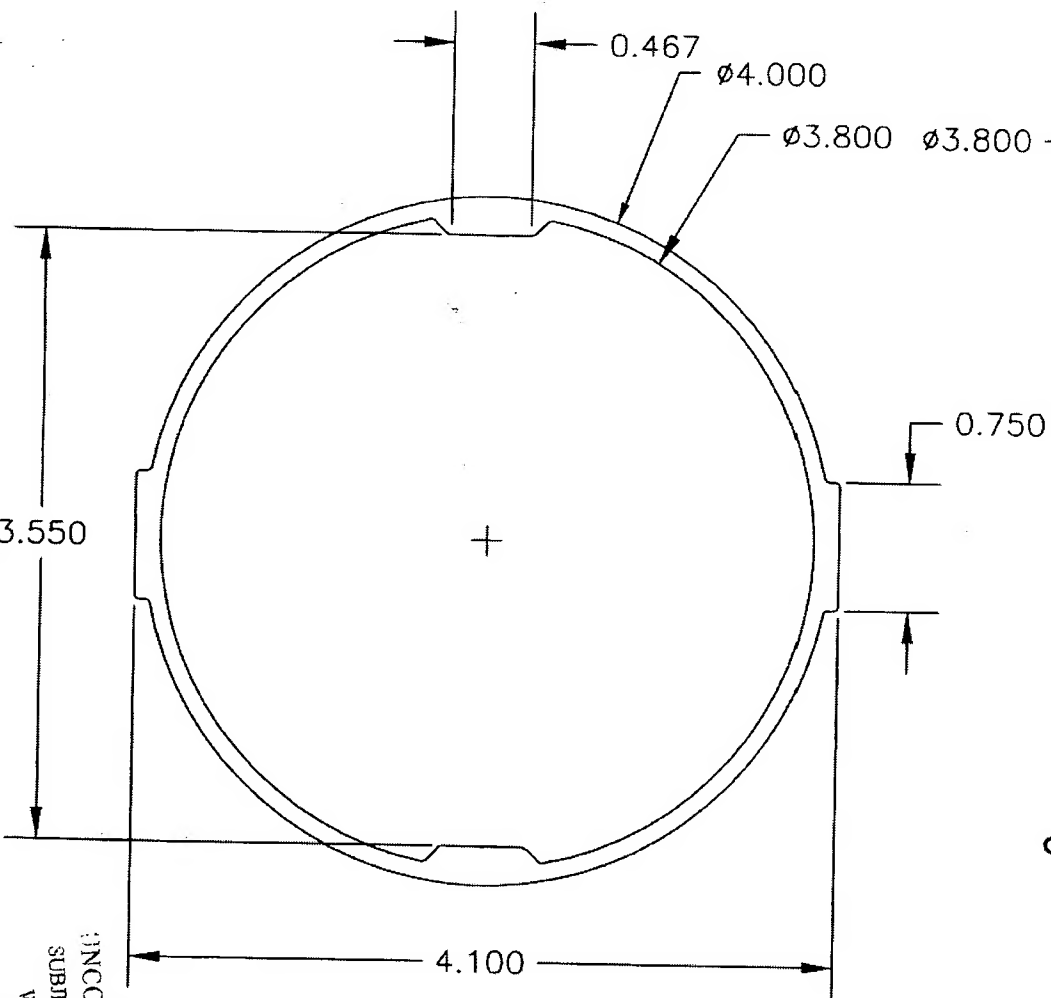


DESIGN	DRAWN BY	DART AEROSPACE LTD VICTORIA INTERNATIONAL AIRPORT, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. F
DATE		D2500	SHEET 2 OF 2
97:09:29		TITLE	SCALE
		EXTRUSION	1:1

RELEASED
97/10/06 DS



D2500-3



D2500-1

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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 29602



CERTIFICATE OF COMPLIANCE

BON L CANADA INC

1850 CLEMENTS ROAD
PICKERING, ON L1W 3R8

Cert Date	Cert No	Sales Order	Page
01/03/07	152900	49192	1
Cert PO	R/I No	Lot	Date
2537	00329982	49192010	1/03/07

Sold To	Ship To
46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7	46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Item No	Part No	Item Description	Guest Part
1.001	DAA-897105-2	190" Mill 6061 T6	D2500-1-190

Gross Weight	262 KGS
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Net Qty	252 KG	20 PC	97 M	1 PKG
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Specification	Die Desc
AMS-QQ-A-200/8 & ASTM B221-00	

Mechanical Tests:

Test No.	Tensile MPA / KSI	Yield MPA / KSI	%Elongation	Conductivity	Bend/ Drift HREW
1	293.7 / 42.6	271.2 / 39.4	8.7	.0	92

Chemical Limits:

	SI	FE	CU	MN	MG	CR	ZN	TI	OTHER
MIN:	.40	.00	.15	.00	.80	.04	.00	.00	EA: .05
MAX:	.80	.70	.40	.15	1.20	.35	.25	.15	TOT: .15

This will certify that the material described herein has been inspected and tested in accordance with Bon L Canada's standard sampling and testing procedures or in accordance with the requirements of any specifications forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgement form. No other warranties are applicable.

Conchita Ko, QA Manager Signed for Bon L Canada



CERTIFICATE OF COMPLIANCE

BON L CANADA INC

1850 CLEMENTS ROAD
PICKERING, ON L1W 3R8

Cert. Date	Cert. No.	Sales Order	Page
01/03/07	152893	49192	1
Cust. PO	P/L No.	Lot	Date
2537	00329977	49192010	1/03/07

Sold To	Ship To
46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7	46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON

Item No	Part No	Item Description	Cust Part
1.000	DAA-897105-2	190" Mill 6061 T6	D2500-1-190

Gross Weight	1862 KGS
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Net Qty	1,792 KG	143 PC	690 M	7 PKG
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Specification	Dim Desc
AMS-QQ-A-200/8 & ASTM B221-00	

Mechanical Tests:

Test No.	Tensile MPA / KSI	Yield MPA / KSI	%Elongation	Conductivity	Bend/ Drift HREW
1	293.7 / 42.6	271.2 / 39.4	8.7	.0	92

Chemical Limits:

	SI	FE	CU	MN	MG	CR	ZN	TI	OTHER
MIN:	.40	.00	.15	.00	.80	.04	.00	.00	EA: .05
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Conchita Ko, QA Manager Signed for Bon L Canada

Conchita Ko.